



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

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BUILDING, FIRE AND PLUMBING COMMITTEE SUMMARY MEETING MINUTES

MONITOR Enterprise Services, Rm 2208
LOCATION: 1500 Jefferson Street
Olympia, Washington

MEETING DATE: June 12, 2014

Agenda Items	Committee Actions/Discussion
1. Welcome and Introductions	Meeting called to order at 10:00 a.m. <u>Members in Attendance:</u> Dave Peden, Chair; Dave Kokot; Ray Allshouse; Tom Balbo; Steve Simpson <u>Staff In Attendance:</u> Tim Nogler, Managing Director; Joanne McCaughan; Peggy Bryden <u>Visitors Present:</u> Kraig Stevenson, Lee Kranz, Gary Nordeen, Ed Golden, Jeff Randall
2. Review and Approve Agenda	The agenda was approved as published.
3. IRC TAG Report – Emergency Rule Request M2302 – Photovoltaic Solar Energy System	<p>Ray Allshouse began the report stating a proposal was received regarding photovoltaic solar systems. The original proposal was looking for a permit exemption for systems up to a certain criteria. There was great concern when reviewed by the TAG, as staff questioned whether or not the SBCC had the authority to amend Ch. 1, which is the administrative chapter. Based on the AG's opinion on this, the proposal was rewritten to reflect a prescriptive path, making the permit requirement up to each jurisdiction.</p> <p>In the subsequent TAG meeting a proposal was created that would be a prescriptive path for these systems. The TAG recommends this be moved forward as an emergency rule.</p> <p>Tim Nogler discussed M2302, which is in effect now and reviewed some of the input we have received on the issue; we could not identify a specific test standard to cite for PV panel installation. The ASCE standard is used by manufacturers. He recommends that Item 1 could refer to wind speed requirements, in accordance with the</p>

manufacturers' recommendations. Further work on the proposal is needed by the Committee for presentation at the Council meeting.

Dave Peden opened the public comment period, allowing 2 minutes per comment.

There was a discussion on what the test standards should be. This was discussed at the TAG and further investigation found that there wasn't a test standard that could be used. There was a suggestion that item 1 could stipulate that the solar PV system must be designed for wind speed of the local area and be installed per manufacturer's specifications.

The language would need some further amendment if it is to be considered for an emergency rule.

Public Comment.

Gary Nordeen - WSU Energy Program. He is the proponent for the code change proposal. This was collaboration with a number of players including Dept. of Commerce and NW Seed. WABO was consulted and they are not opposed to this. This was word-smithed at the last IRC TAG and was passed unanimously to move forward using the emergency rule process. Some statistics were provided that would prompt this to be an emergency rule due to economic impacts, green jobs, and climate change.

Jeff Randall with Power Trip Energy has also participated in this process. As members of the Solar Installers of Washington, his group supports this proposal with the modification that Tim referred to. This effort is really important to ensure that the solar industry and the building departments around the state are able to be on the same page and move projects forward.

Ray Allshouse asked a question regarding local wind speed requirements. He wonders whether this is something that manufacturers have generic designs for various wind speeds. **Jeff** stated from an installer's perspective, in their experience every manufacturer provides an installation manual for all of their components. There are common issues that they all address regarding engineering issues. For example how far a rail can extend out on the sides past the last attachment to the roof. They all have engineers working on their staff, all are working from the same code books, and they prepare the product installation manuals from the

information in the code books.

Ray then asked if the installers would consider a range of different approaches for different wind speeds. Jeff replied in the affirmative. There is a range of different wind speeds and different exposures depending on the geographic location.

Lee Kranz, Chair of WABO Technical Code Development Committee, pointed out some things to the Committee. There is a website that created a construction tip sheet no. 24 back in June 2012, which is very similar to this proposal that exempts requirement for a building permit for PV panels of a certain size and weight. He supports this proposal. He thinks it eliminates some of the obstacles to getting PV panels installed on single family residential occupancies. The installation still has to comply with code, and an electrical permit is still required. He thinks this approach is a good one and he will push for this nationally. He posed a question regarding a 1,000 lbs. weight limit for each panel; he doesn't see that covered in the proposal. Was that a conscious decision to not include that, or was it discussed?

Gary Nordeen stated this was not discussed, but it wasn't intentionally left out. With the weight limit of 4 lbs. per sq. ft. and the point loads at 50 lbs., the maximum weight limit did not apply.

Kraig Stevenson, ICC asked for clarification of the exemption from M2302.2.2.1 having to do with the noncombustible material; or is it exempted from the noncombustible framing requirement? **Tim** said the TAG discussed this. Some of the language was modified to address this. It would not provide an exemption for the noncombustible materials. **Gary** stated we are not exempting anything from a permit with this proposal. There will be a checklist. We are trying to minimize the excessive engineering costs which make solar installers unable to do their jobs.

Dave Peden has a question for those who were on the TAG. He is curious about exception 2. What was the thinking on the ground snow load? **Gary** said the 70 lb. load came from some concerns from some eastern Washington jurisdictions that had mountainous terrain where the snow loads were going to 200-250 lb. per sq. ft. The 70 lb. threshold is the one in the IRC that is common to the cut-off point where engineering is not required. If

	<p>installing the panels in a location where the ground snow load is 70 lbs. or less, the engineering report is not needed.</p> <p>Dave Peden asked if the Committee would agree to reword exception 1. The Committee agreed to this. Tim read the proposed language. “The solar photovoltaic panel system shall be designed for the wind speed of the local area, and shall be installed per manufacturer’s specifications.” Dave asked whether a reference is needed to ASCE-7 re: wind speed of the local area. Tim replied the suggestion is that the proposed language “shall be designed” covers that issue.</p> <p>Dave Peden then asked if the Committee thinks it is clear enough in these exceptions that the panels will be mounted to resist wind uplift forces. Jeff said it goes without saying because that is referring to a part of the manufacturer’s instructions. How the array is attached to the roof substructure is extremely important and it is covered in the specifications.</p> <p>Steve Simpson moved the Committee accept exception 1 as it was re-worded. Tom Balbo seconded the motion.</p> <p>The motion carried.</p> <p>Steve Simpson moved the committee accept the amendment with the reworded exception language. Tom Balbo seconded the motion.</p> <p>Dave Kokot agrees with the recommendation from Kraig to move the amendment up to follow the first sentence of the sub-section M2302.2.1. Tim clarified that the TAG did discuss that, and it is a simple solution to place the exception after the first sentence of the section and move the rest of the section below the exception.</p> <p>Steve accepted this as a friendly amendment to the motion. The motion carried.</p>
<p>Motion</p>	<p>Motion</p> <p>Dave Peden indicated he would entertain a motion to move the issue to emergency rulemaking. This is due to the severe negative economic impact for the solar panel installers, as noted in the Declaration of Emergency.</p> <p>Dave Kokot moved that M2302, Photovoltaic Solar Energy System be forwarded on as an emergency rule request to the Council. Tom Balbo seconded the motion.</p> <p>The motion carried.</p> <p>Tim noted that the original proposal on solar ready roofs had been withdrawn by the proponent.</p>

4. IBC TAG Report

Proposal 14-06, Guards
Interpretation Request – City of Shoreline
14-JUN01 – 101.3.6 Mech. Equipment

Dave Peden shared the interpretation with the Committee. **Tim** said the original proposal had to do with the Mechanical Code Section 304.11, Guards. The question deals with existing buildings and whether guards are required when repair or replacement of mechanical work is done on the roof of an existing building. The answer is guards would not be required where doing a repair or replacement of mechanical equipment on an existing building. L & I regulates fall protection on roof tops; since appropriate fall arrest equipment is required, guards are not required to be installed on existing commercial buildings.

Dave Peden added the TAG agreed this was a good approach. The rulemaking process is costly to the state so this clarifies the issue without incurring additional cost.

Kraig Stevenson with ICC said there is an 18 in. problem here and this doesn't entirely solve the WAC 296.155. In reading the packet it requires fall protection at 4 ft. and greater. This is not a new requirement. Uniform Mechanical 1997 has always required a service platform. Also Section 104.2 of the 1997 code states mechanical systems lawfully in existence at the time of this code may have their use, maintenance or repair continued if it is in accordance with the original design and location and no hazard to life, health or property is being created by such mechanical systems. Some code officials will go with that interpretation, but the 18 in. difference is overlooked in the original installation, and now doing a repair we want the guardrail on. The Fire Code, Mechanical Code and Building Code of 2015 resolve this problem not only for existing buildings but for also new construction where it provides an exception to the guardrail requirement and there is consistency.

The Committee might want to enter normal rulemaking and adopt an amendment that is consistent with the 2015 code, or just wait until the 2015 codes.

Lee Kranz, Bellevue, states that other than the cost, ascetics and potential to create leaks in the roof there are fall protection requirements in place. They are used by only one or two individuals every couple of years. The roofing industry in the past have tried to require anchors to be installed on the ridge of every roof and those proposals have been denied. He thinks it is appropriate to have railings on new buildings, but not on existing buildings.

<p style="text-align: center;">Motion</p>	<p>Lee supports the interpretation, but as a building official, he feels, that puts building officials in a quandary because there is an assumption that it will be used in compliance. He feels the language should be modified to state the regulations are already in place and would be adequate for existing buildings.</p> <p>Ed Golden, the proponent of E108-12, can understand what people are saying. As a roof maintenance contractor he feels we are back to the same thing. Every time someone gets on a roof they have to install fall protection. It doesn't make any sense to adopt the 2015 model code. Each person that works on the roof shouldn't have to install roof protection.</p> <p>Ray Allshouse appreciates Lee's comments and he thinks it might be appropriate to add that fall protection equipment is being used. As far as permanent installation, we have been through that before and it shouldn't be revisited.</p> <p>Dave Kokot suggested that based on the first sentence in the answer addressing the WAC regulation, the second sentence should be removed and delete everything up to the first comma, so that it would read: "Guards are not required to be installed on existing commercial buildings."</p> <p>Ray Allshouse moved the Committee accept the interpretation as rewritten. Dave Kokot seconded the motion. The motion carried.</p>
<p>6. Staff Report</p>	<p>Tim Nogler reported we have a request to review a local planning/zoning ordinance for a Puget Sound jurisdiction. The issue is related to restrictions on the type of roofing material allowed, based on environmental impact. Staff assessment is that if it affects requirements of the building code for construction, then it would need Council approval. This may come to the Council in the future.</p>
<p>8. Other Business</p>	<p>Tim reminded the Committee of the Council meeting scheduled for June 13 at 10:00 a.m.</p>
<p>9. Adjourn</p>	<p>The meeting was adjourned at 11:00 a.m.</p>